

ABSTRACT OF THE DISCLOSURE

A lignocellulose material is cooked by means of an alkaline cooking liquor containing polysulfides in the presence of a quinone-hydroquinone compound, of which the 5 oxidation-reduction potential in the form present during the cooking, which potential is a value calculated as a standard oxidation-reduction potential (E_a) with a hydrogen ion activity of 1, is within a range of from 0.12 to 0.25V to the standard hydrogen electrode 10 potential. It is thereby possible to cook the lignocellulose material with a low Kappa number and in good yield and at the same time, to reduce the amount of the chemical solution used and to reduce the load on a recovery boiler.